AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

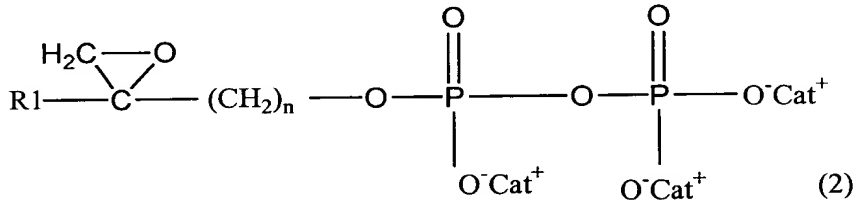
LISTING OF CLAIMS:

1-84. (canceled)

85. (currently amended) A method for activating a Tγ9δ2 lymphocyte in vitro, comprising:

contacting in vitro a Tγ9δ2 lymphocyte with an effective amount of a compound comprising at least one phosphoepoxide group, said compound having a formula selected from the group consisting of

(a) a compound having the following formula:



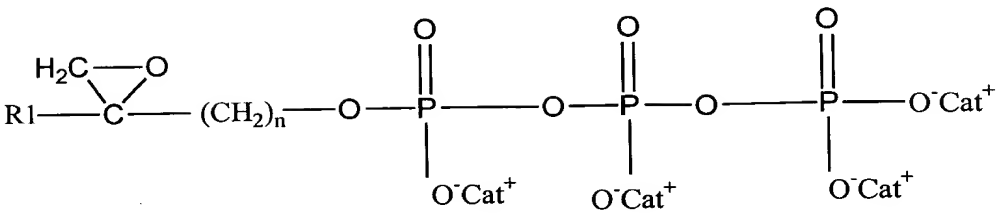
(2)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20;

(b) a compound having the following formula:



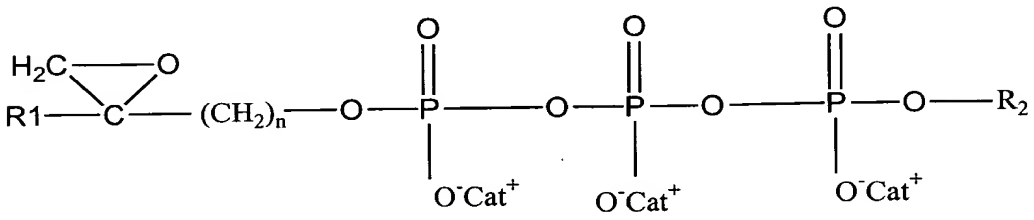
(4)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20; and.

(c) a compound having the following formula:



(5)

wherein R1 is selected from among $-CH_3$ and CH_2CH_3,

Cat^+ is a cation, and

n is an integer between 2 and 20, and

R2 is a biomolecule.

86. (previously presented) The method according to claim 85, wherein said compound is brought into contact with a $T\gamma 9\delta 2$ lymphocyte in the presence of a T lymphocyte growth factor.

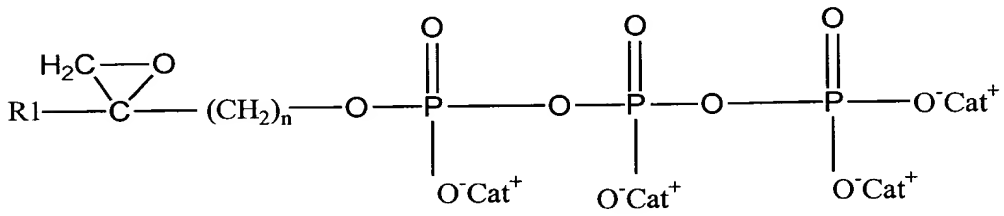
87. (previously presented) The method according to claim 85, wherein said T lymphocyte growth factor is IL-2.

88. (previously presented) The method according to claim 85, wherein said compound is introduced into a medium containing said Tγ9δ2 lymphocytes and cells.

89. (previously presented) The method according to claim 85, wherein said compound and said Tγ9δ2 lymphocyte are introduced into a medium that allows for T lymphocyte growth.

90-95. (canceled)

96. (previously presented) A compound of the formula:



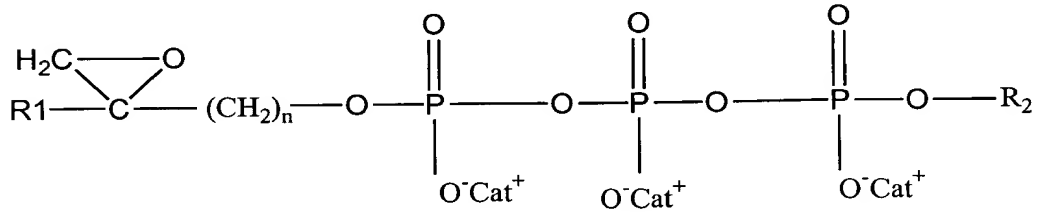
(4)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20.

97. (previously presented) A compound of the formula:



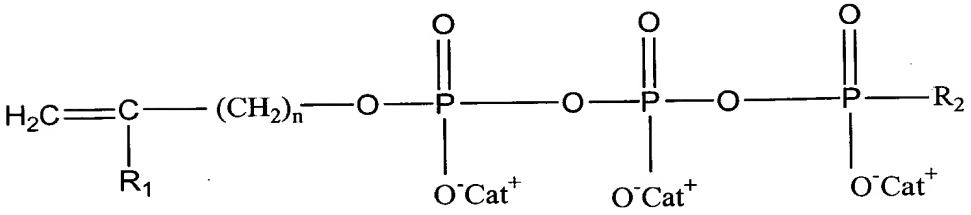
(5)

wherein R1 is selected from among $-CH_3$ and CH_2CH_3,

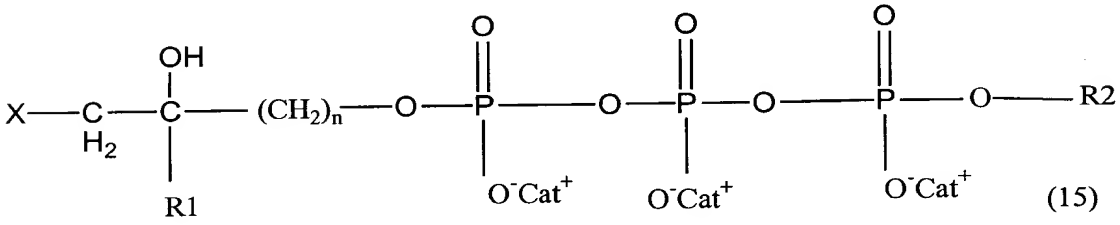
Cat^+ is a cation,

n is an integer between 2 and 20, and

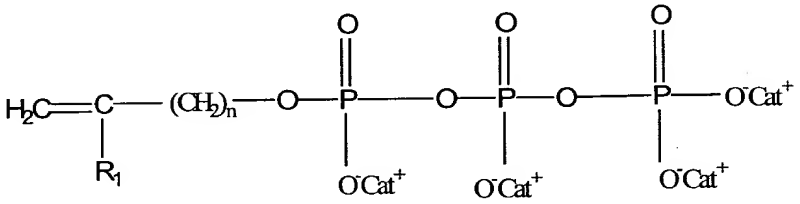
R2 is a biomolecule.



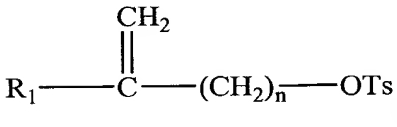
(14)



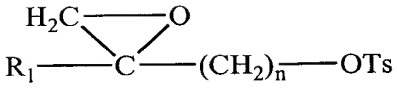
(15)



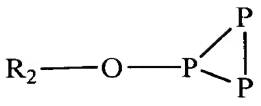
(11)

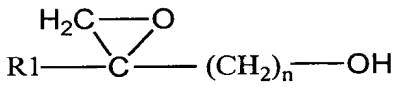


(8)



(13)

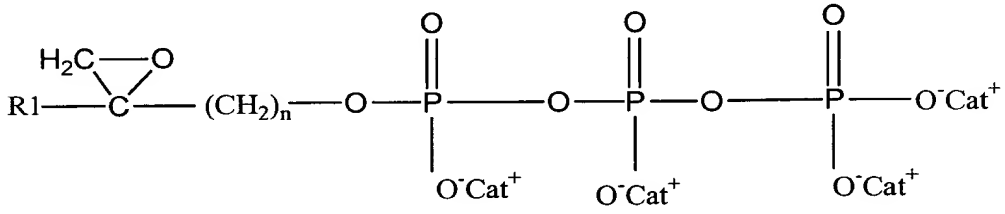




(20)

98. (previously presented) A composition comprising an excipient and a compound that can activate Tγ9δ2 lymphocyte, wherein said compound is selected from the group consisting of:

a) a compound of the formula:



(4)

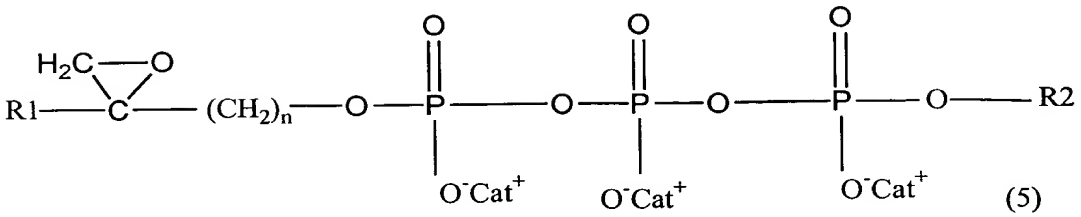
wherein R1 is selected from among $-CH_3$ and $-CH_2-CH_3$,

Cat^+ is a cation,

n is an integer between 2 and 20; and

b) a compound of the formula:

a compound of the formula:



(5)

according to claim 97.

99. (previously presented) The composition according to claim 98, further comprising a pharmaceutically acceptable excipient.

100-102. (canceled)

103. (currently amended) The composition according to claim 98, wherein said compound is diluted in a sterile phosphate buffer at [[ph7]] pH 7.

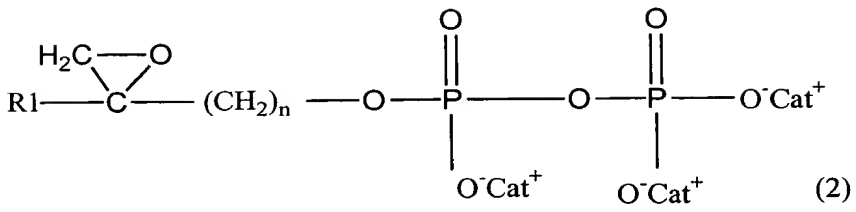
104. (previously presented) The composition according to claim 98, wherein said composition is in the form of a composition that can be topically administered.

105. (previously presented) The composition according to claim 98, further comprising primate Tγ9δ2 lymphocytes.

106. (previously presented) The composition according to claim 98, further comprising a T lymphocyte growth factor.

107. (currently amended) A method for activating Tγ9δ2 lymphocytes in a primate, comprising directly administering to said primate an effective amount of ~~a compound selected from the group consisting of:~~

~~a)~~ a compound of the formula:



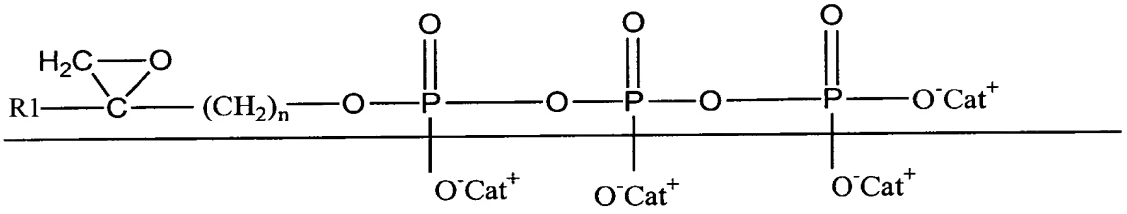
(2)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat+ is a cation,

n is an integer between 2 and 20~~;~~

~~b) a compound of the formula:~~



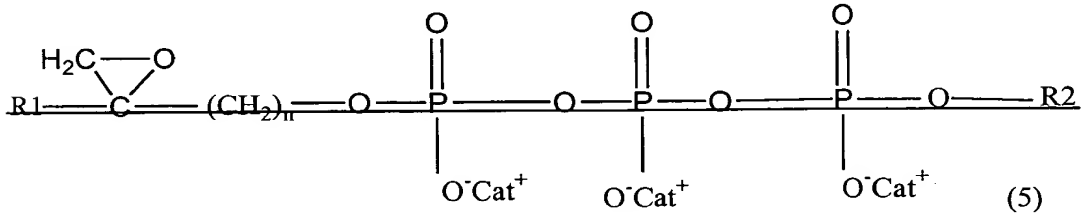
(4)

~~wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,~~

~~Cat+ is a cation,~~

~~n is an integer between 2 and 20; and~~

~~c) a compound of the formula:~~



(5)

~~according to claim 97~~.

108. (previously presented) The method according to claim 107, further comprising topically administering said compound.

109. (previously presented) The method according to claim 107, further comprising administering said compound into a peripheral bloodstream of a primate.

110. (previously presented) The method according to claim 107, further comprising parenterally administering said compound into a peripheral bloodstream of a primate.

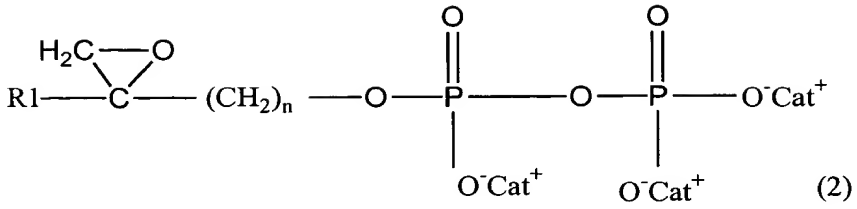
111. (previously presented) The method according to claim 107, wherein said primate suffers from cancer.

112. (previously presented) The method according to claim 107, wherein said primate suffers from a parasitic condition.

113. (previously presented) The method according to claim 107, wherein said primate suffers from a disease selected from the group consisting of cancers, parasitic conditions and pathological immunodeficiency syndromes.

114. (currently amended) A method for activating Tγ9δ2 lymphocytes in a vertebrate, comprising directly administering to said vertebrate an effective amount of ~~compound selected from the group consisting of:~~

~~a)~~ a compound of the formula:



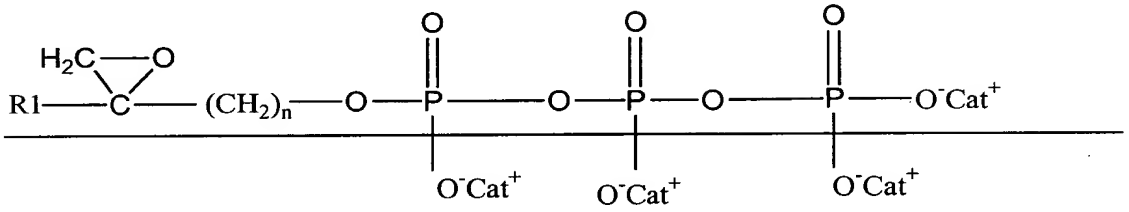
(2)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat+ is a cation,

n is an integer between 2 and 20~~;~~

~~b) a compound of the formula:~~



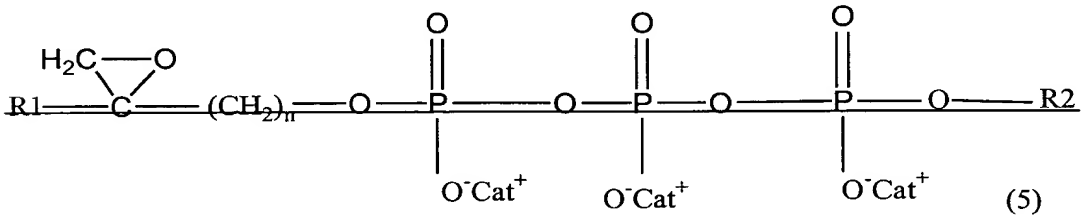
(4)

~~wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,~~

~~Cat+ is a cation,~~

~~n is an integer between 2 and 20; and~~

~~(c) a compound of the formula:~~

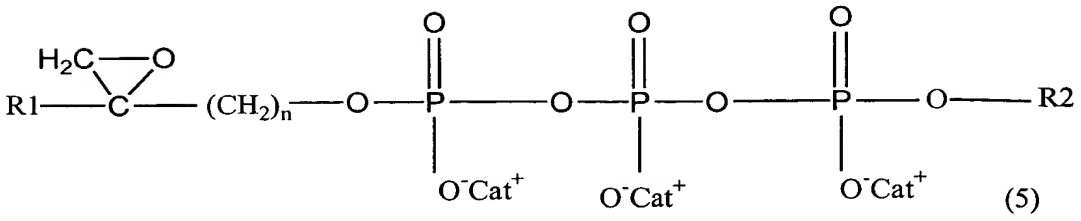


(5)

~~according to claim 97~~.

115. (canceled)

116. (previously presented) A compound of the formula:



(5)

wherein R1 is selected from among $-CH_3$ and $-CH_2-CH_3$,

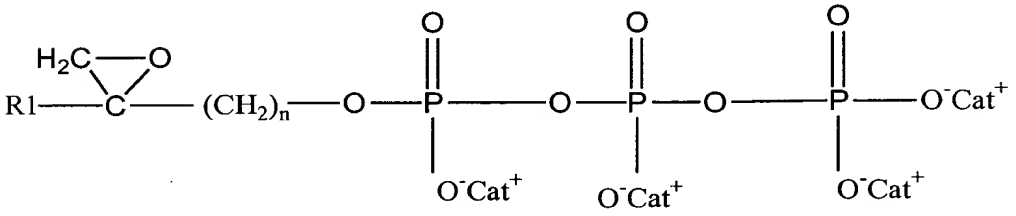
Cat^+ is a cation,

n is an integer between 2 and 20, and

R2 is selected from the group consisting of a nucleoside and a phosphoepoxide.

117. (previously presented) A composition comprising an excipient and a compound that can activate Tγ9δ2 lymphocytes, wherein said compound is selected from the group consisting of

a) a compound of the formula:



(4)

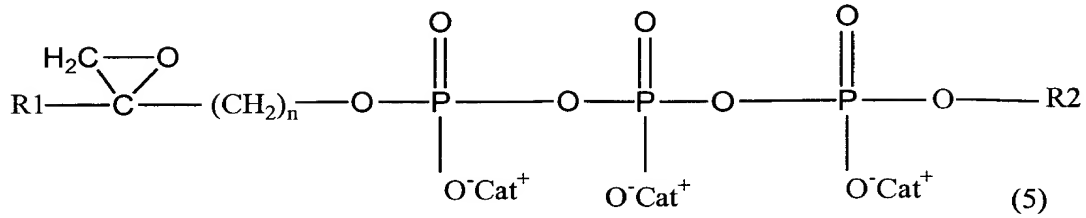
wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20,

and

b) a compound of the formula:



(5)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

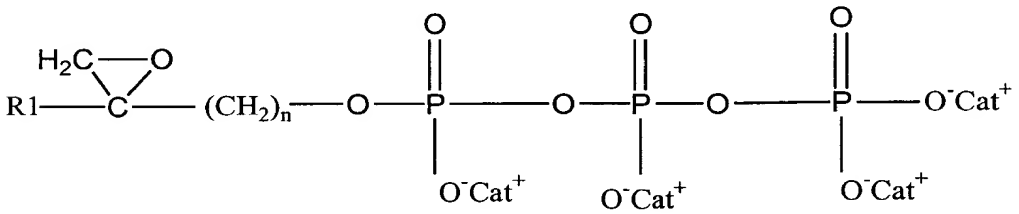
Cat^+ is a cation, and

n is an integer between 2 and 20,

and R2 is selected from the group consisting of a nucleoside and a phosphoepoxide.

118. (currently amended) ~~A method for activating Tγ9δ2 lymphocyte, comprising:~~ The method according to claim 85, wherein said compound is

~~contacting a Tγ9δ2 lymphocyte with an effective amount of~~ a compound having a formula ~~selected from the group consisting~~ of: ~~a)~~



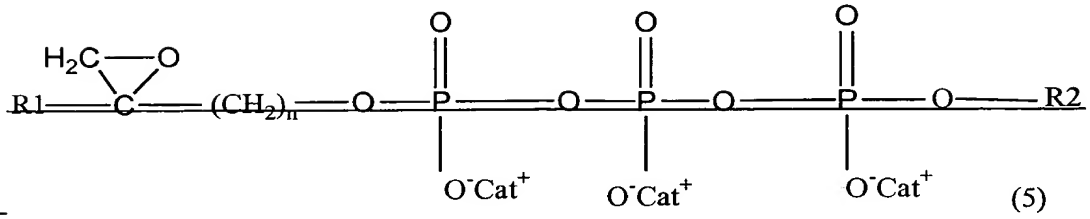
(4)

wherein R1 is selected from among $-CH_3$ and $-CH_2-CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20~~; and~~

~~b)~~



(5)

~~wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,~~

~~Cat^+ is a cation,~~

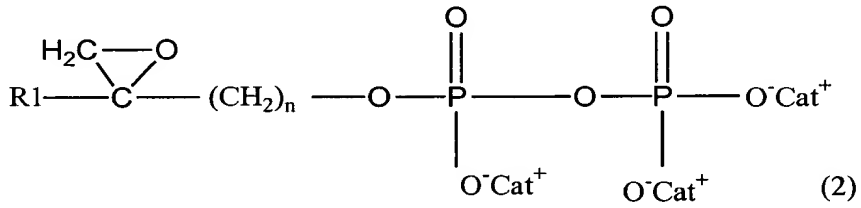
~~n is an integer between 2 and 20, and~~

~~R2 is a substituent selected from the group consisting of a nucleoside and a phosphoepoxide~~.

119. (currently amended) A method for activating a Tγ9δ2 lymphocyte ~~*in vitro*~~, comprising:

contacting a Tγ9δ2 lymphocyte with an effective amount of a compound comprising at least one phosphoepoxide group, said compound having a formula selected from the group consisting of

(a) a compound having the following formula:



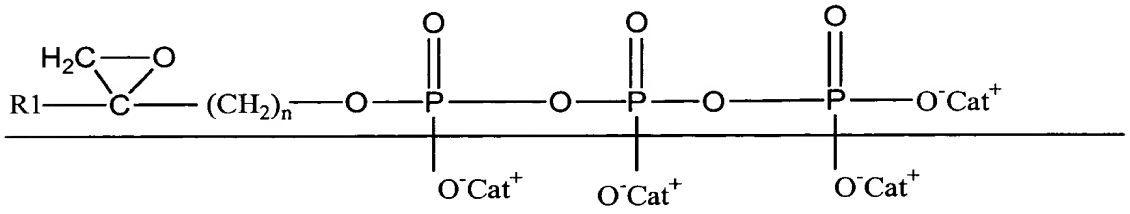
(2)

wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,

Cat^+ is a cation, and

n is an integer between 2 and 20~~,~~

~~(b) a compound having the following formula:~~



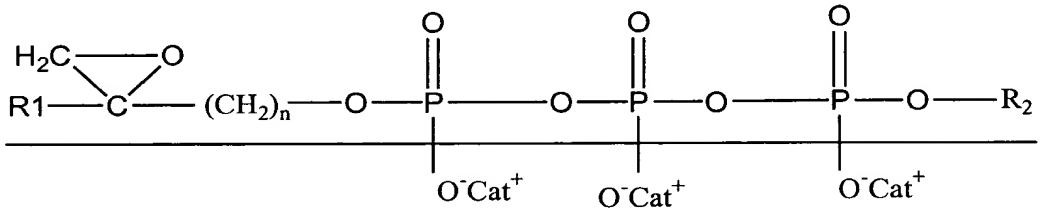
(4)

~~wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,~~

~~Cat^+ is a cation, and~~

~~n is an integer between 2 and 20; and~~

~~(c) a compound having the following formula:~~



(5)

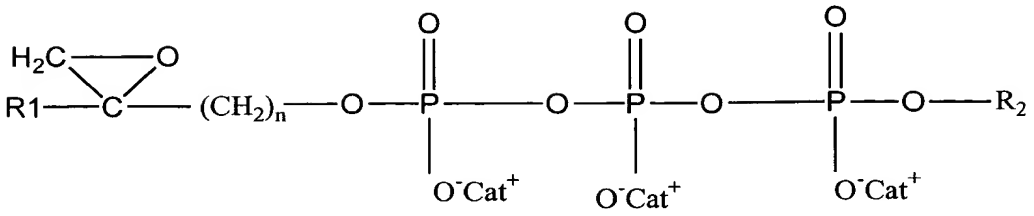
~~wherein R1 is selected from among $-CH_3$ and $-CH_2CH_3$,~~

~~Cat^+ is a cation, and~~

~~n is an integer between 2 and 20, and~~

~~R2 is a biomolecule~~.

120. (new) The method according to claim 85, wherein said compound is a compound having the following formula:



(5)

wherein R1 is selected from among $-CH_3$ and CH_2CH_3,

Cat^+ is a cation, and

n is an integer between 2 and 20, and

R2 is a biomolecule.